Issuance Date: June 23, 2011
Effective Date: July 1, 2011
Expiration Date: June 30, 2016

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT No. WA-0045144

State of Washington
DEPARTMENT OF ECOLOGY
Olympia, Washington 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

Liberty Lake Sewer and Water District

1926 N. Harvard Road

Liberty Lake, WA 99019

Plant Location: 1926 N. Harvard Rd; between I-90 and the Spokane River	Receiving Water: Spokane River
Water Body I.D. No.: WA-57-1010	Discharge Location: Latitude: 47.678333° N Longitude: 117.116662° W
Plant Type: extended aeration activated sludge	

is authorized to discharge in accordance with the special and general conditions that follow.

James M. Bellatty
Water Quality Section Manager
Eastern Regional Office

TABLE OF CONTENTS

GENERAL CONDITIONS

SUMMARY OF SCHEDULED PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3.	Discharge Monitoring Report	Monthly	August 15, 2011
S3.E	Noncompliance Notification	As necessary	---
S4.E.	Waste load Assessment	Annually	March 15, 2012
S5.G.	Updated Operations and Maintenance Manual – letter of completion	1/ permit cycle	March 15, 2012
S6.D	Industrial User Survey – Update	1/permit cycle	February 15, 2012
S6.H	Local Limit Development	1/permit cycle	January 15, 2012
S6.I	Local Sewer Ordinance Update	1/permit cycle	October 15, 2012
S8.A.	Acute Toxicity Characterization Summary Report	2/ permit cycle	December 15, 2012
S9.A	Chronic Toxicity Tests Characterization Summary Report	2/ permit cycle	December 15, 2012
S11.A	Updated Engineering Report for Phosphorus Removal and Reuse	1/permit cycle	October 30, 2012
S11.B	Contract Documents submitted for construction of phosphorus removal process units to achieve final TP effluent limitations	1/permit cycle	October 1, 2014
S11.D	Certificate of Construction and Start up Completion for Compliance with Spokane River and Lake Spokane DO TMDL WLAs	1/permit cycle	March 1, 2018
S12.A.2	Toxics Management Plan	Annually	September 15, 2012
S12.B.	PCBs, 2,3,7,8 TCDDs and PBDE QAPP QAPP for temperature	2/permit cycle	October 15, 2011 March 15, 2012
S13.	Regional Toxics Task Force organizational and governing documents.	1/permit cycle	November 30, 2011
S14.	Application for Permit Renewal	1/permit cycle	January 1, 2016

SPECIAL CONDITIONS

S1. DISCHARGE LIMITATIONS

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit.

A. Interim phase 1 Effluent Limitations

Beginning on the effective date of this permit and lasting until **October 31, 2012** or the date of approval by the Department of an engineering report demonstrating how the District intends to implement the requirements of the Spokane River DO TMDL with regards to Total Phosphorus, the Permittee is authorized to discharge municipal wastewater at the permitted location subject to complying with the following limitations:

	EFFLUENT LIMITATIONS [a]: OUTFALL # 1	
Parameter	**Average Monthly**	**Average Weekly**
Flow	1.0 MGD	---
Biochemical Oxygen Demand (5 day)	10 mg/L; 83 lbs/day	15 mg/L; 125.1 lbs/day
Total Suspended Solids	10 mg/L; 83 lbs/day	15 mg/L; 125.1 lbs/day
Fecal Coliform Bacteria	200 cfu /100 mL	400 cfu /100 mL
pH	Daily minimum is equal to or greater than 7 and the daily maximum is less than or equal to 8.5.	
Total Phosphorus (as P)	0.612 mg/L Average for the discharge period April 1 to October 31	
Total PCBs	See Section S12.A.2, S13 and footnote f	
Parameter	**Average Monthly**	**Maximum Daily [b]**
Lead (Total Recoverable)	3.7 ug/L	5.4 ug/L
Zinc (Total Recoverable)	80.8 ug/L	117.8 ug/L
Cadmium (Total Recoverable)	76 ug/L	396 ug/L
Parameter	**Seasonal Average**	**Average Weekly**
Total Ammonia (as NH_3-N)	---	---
For "season" of April 1 to Oct. 31	1 mg/L; 11.8 lbs/day	---
[a] The average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of fecal coliform, which is based on the geometric mean.		
[b] The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.		

B. Interim phase 2 Effluent Limitations

Beginning on the date of approval by the Department of an engineering report amending the previously approved engineering report demonstrating how the District intends to implement the requirements of the Spokane River DO TMDL with regards to Total Phosphorus, and lasting until **March 31, 2018**, the Permittee is authorized to discharge municipal wastewater at the permitted location subject to complying with the following limitations:

	EFFLUENT LIMITATIONS [a]: OUTFALL # 1	
Parameter	**Average Monthly**	**Average Weekly**
Flow	2.0 MGD	---
Biochemical Oxygen Demand (5 day)	10 mg/L; 83 lbs/day	15 mg/L; 125.1 lbs/day
Total Suspended Solids	10 mg/L; 83 lbs/day	15 mg/L; 125.1 lbs/day
Fecal Coliform Bacteria	200 cfu /100 mL	400 cfu /100 mL
pH	Daily minimum is equal to or greater than 7 and the daily maximum is less than or equal to 8.5.	
Total Phosphorus (as P)	0.612 mg/L Average for the discharge period March 1 to October 31 and no more than 7.20 lbs/day on average for the season.	
Total PCBs	See Section S12.A.2, S13 and footnote f	
Parameter	**Average Monthly**	**Maximum Daily [b]**
Lead (Total Recoverable)	3.7 ug/L	5.4 ug/L
Zinc (Total Recoverable)	80.8 ug/L	117.8 ug/L
Cadmium (Total Recoverable)	76 ug/L	396 ug/L
Parameter	**Seasonal Average**	**Average Weekly**
Total Ammonia (as NH_3-N)	---	---
For "season" of March 1 to Oct 31	1 mg/L; 11.8 lbs/day	---
[a] The average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of fecal coliform, which is based on the geometric mean.		
[b] The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.		

C. Final Effluent Limitations

Beginning **March 1, 2018** the Permittee must have installed the full phosphorus removal process train including chemical addition and have operational the technology needed to comply with the following effluent limitations during the season March 1 to October 31. Beginning **March 1, 2021** the Permittee is authorized to discharge municipal wastewater at the permitted location subject to complying with the following limitations:

	EFFLUENT LIMITATIONS [a]: OUTFALL # 1	
Parameter	**Seasonal Average Effluent Limit Applies March 1 to October 31**	
Carbonaceous Biochemical Oxygen Demand (5 day) ($CBOD_5$)	45.0 lbs/day See footnote d and e	
Total Phosphorus (as P)	0.45 lbs/day See foot note c, d and e	
Parameter	**Seasonal Average Effluent Limit**	
Total Ammonia (as NH_3-N)	See footnote d and e	
For "season" of March 1 to May 31	8.94 lbs/day	
For "season" of June 1 to Sept. 30	2.27 lbs/day	
For "season" of Oct. 1 to Oct. 31	8.94 lbs/day	
Parameter	**Average Monthly**	**Average Weekly**
Flow	2.0 MGD	---
$CBOD_5$ – Nov. 1 through Feb. 29	5 mg/L, 83.4 lbs/day	7 mg/L, 116.8 lbs/day
Total Suspended Solids	5 mg/L, 83.4 lbs/day	7 mg/L, 116.8 lbs/day
Fecal Coliform Bacteria	200 cfu /100 Ml	400 cfu /100 mL
pH	Daily minimum is equal to or greater than 7 and the daily maximum is less than or equal to 8.5.	
Total PCBs	See Section S12.A.2, S13 and footnote f	
Lead (Total Recoverable)	3.7 ug/L	5.4 ug/L
Zinc (Total Recoverable)	80.8 ug/L	117.8 ug/L
Cadmium (Total Recoverable)	76 ug/L	396 ug/L

[a] The average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of fecal coliform, which is based on the geometric mean.

[b] The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.

[c] The Permittee shall comply with the following effluent limitations: 1) The seasonal average concentration measured at the point of discharge shall be 50 µg/L TP or less, based on the arithmetic mean of daily discharges measured between March 1st and October 31st.

[d] Compliance will be based on a combining of the effluent quality, pollutant equivalencies in term of oxygen depletion and the DO TMDL and pollutant credit earned from implementation of the Managed Implementation Plan, following public review and comment and then Ecology approval.

[e]	Adjustments to the final effluent based on demonstrated pollutant equivalencies or non bioavailable P will be implemented as major permit modifications requiring public notice and comment.
[f]	The effluent monitoring results for PCBs will be compiled and analyzed by Ecology for the purpose of establishing a performance based PCB effluent limitation for the following permit cycle.

D. Mixing Zone Descriptions

The maximum boundaries of the mixing zones are 300 feet downstream from the outfall and 34 feet in width.

S2. MONITORING REQUIREMENTS

A. Monitoring Schedule

Category	Parameter	Units	Minimum Sampling Frequency	Sample Type
Wastewater Influent	BOD_5 [a] ave. & max.	mg/L, lbs/day	1/ week	24-hour Composite
	TSS, ave. & max.	mg/L, lbs/day	1/ week	
	Total Phosphorus	mg/L, lbs/day	1/ week	
	pH	s.u.	Continuous *	Meter
	Ammonia (as N)	mg/L	1/ 2 weeks	24-hour Composite
	Total Nitrogen (TN)	mg/L	1/ 2 weeks	24-hour Composite
	Cadmium (Total Recoverable)	ug/L	1/month	"
	Lead (Total Recoverable)	ug/L	1/month	"
	Zinc (Total Recoverable)	ug/L	1/month	"
	Arsenic (Total Recoverable) [b]	ug/L	4/ year	"
	Copper (Total Recoverable) [b]	ug/L	4/ year	"
	Mercury (Total Recoverable) [b]	ug/L	4/ year	"
	PBDE [b, j] (polybrominated diphenyl ethers)	ng/L	4/year	24-hour Composite
	Total PCBs [d, e, j]	pg/L	Bi-monthly	24-hour Composite
	2, 3, 7, 8 TCDD [b, d, j]	ng/L	4/year	24-hour Composite
Wastewater Effluent	Flow	MGD	Continuous *	Meter
	BOD_5 [a, f] monthly ave., weekly average, & running average for	mg/L, lbs/day	1/ week	24-hour Composite

Category	Parameter	Units	Minimum Sampling Frequency	Sample Type
	"season"			
	TSS	mg/L, lbs/day	1/ week	24-hour Composite
	pH, min. & max.	Standard Units	Continuous *	Meter
	Fecal Coliforms	cfu / 100 mL	2/ week	Grab
	Temperature	° C	1/ week	Grab
	Total Phosphorus[h, f], monthly average, daily max.& running average for the season	mg/L, lbs/day	1/ week	24-hour Composite
	Total Reactive Phosphorus	mg/L	1/week	24-hour Composite
	Total Alkalinity	mg/L	1/ month	Grab taken in afternoon
	Dissolved Oxygen	mg/L	1/ day	Grab
	Hardness [b]	mg/L	4/ year	24-hour Composite
	Ammonia (as N)[g, f], monthly ave., daily max. & running average for the "season"	mg/L	1/ week	24-hour Composite
	Nitrate (as N)	mg/L	1/ 2 weeks	"
	Cadmium (Total Recoverable)	ug/L	1/month	"
	Lead (Total Recoverable)	ug/L	1/month	"
	Zinc (Total Recoverable)	ug/L	1/month	"
	Copper (Total Recoverable) [b]	ug/L	4/ year	"
	Arsenic (Total Recoverable) [b]	ug/L	4/ year	"
	Mercury (Total Recoverable) [b]	ug/L	4/ year	"
Wastewater Effluent	PBDE [b, d] (polybrominated diphenyl ethers)	pg/L	4/year	"
Wastewater Effluent	Total PCBs [b, d, k]	pg/L	4/year	24-hour Composite

Category	Parameter	Units	Minimum Sampling Frequency	Sample Type
Wastewater Effluent	2, 3, 7, 8 TCDD [b, d]	pg/L	4/year	24-hour Composite
Sludge	Priority Pollutant Metals [c]	mg/Kg	twice/permit cycle	Composited grabs from thickened sludge
WET Testing	acute toxicity [c]	% survival in 100% effluent	twice/permit cycle	24-hour Composite
	Chronic toxicity	NOEC		
Influent and Effluent	Priority Pollutant Scan [c]	ug/L	twice/ permit cycle	24-hour Composite
River immediately upstream of outfall and downstream of mixing zone	Temperature [j]	° C	Continuous July through September	Metered
River immediately upstream of outfall	Alkalinity	mg/L	1 per month July, August September	Grab

[a] Beginning in the fourth year of the permit, the permittee shall begin monitoring for BOD_5 and $CBOD_5$ to establish a correlation of BOD_5 to $CBOD_5$

[b] 4/year: January, April, July, and October

[c] twice/ permit cycle: June 2011 and 2014

[d] After a year of wastewater influent (aka raw sewage) sampling for PCBs; 2,3,7,8 TCDDs and PBDE; the permittee can request changes in the location of the raw sewage sampling for these pollutants in consultation with the ERO Water Quality Program permit manager and the urban waters staff.

[e] Bi-monthly sampling will be in the even numbered months.

[f] Beginning March 1, 2018; for the 3 parameters ($CBOD_5$, NH_3 and TP) with WLAs established by the Spokane River and Lake Spokane DO TMDL, the monthly discharge monitoring report must provide the following information for the "ten year assessment" monitoring and future compliance projections: monthly average, daily maximum, running total for the "season," running average for the "season," projected trend of total lbs. and average concentration and average daily lbs. for remainder of the "season" with future compliance target indicated. If the trend projection indicates a significant potential for noncompliance with the allowable mass limitations to be in effect once the period of formal compliance begins in 2021, the permittee is to communicate the anticipated result of the projection to the Department with appropriate recommendations to correct any trend potentially resulting in non-compliance.

Category	Parameter	Units	Minimum Sampling Frequency	Sample Type
[g] The reporting limit for Total Ammonia (as N) is 50 ug/L, the analytical protocol is listed in Appendix A of this permit. [h] The reporting limit for Total Phosphorus is 5 ug/L, the analytical protocol is listed in Appendix A of this permit. [j] See permit condition S12. [K] Use EPA method 1668 with a reporting limit or quantitation limit of 10 pg/L per congener. For influent monitoring and source tracing a higher limit can be proposed to Ecology in the QAPP if the higher reporting limit still provides adequate source tracing and identification. * Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance. For influent pH, report alarm set points, and time and duration of any alarm event. For effluent pH, sampling shall be taken four (4) times per day until continuous monitoring equipment is installed.				

B. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department of Ecology (Department).

C. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations and at a minimum frequency of at least one calibration per year. Calibration records shall be maintained for at least three years.

D. Laboratory Accreditation

All monitoring data required by the Department shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, pH, and internal process

control parameters are exempt from this requirement. pH shall be accredited if the laboratory must otherwise be registered or accredited.

S3. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to the Department shall constitute a violation of the terms and conditions of this permit.

A. Reporting

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring data obtained during each monitoring period shall be summarized, reported, and submitted on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by the Department. DMR forms shall be received by the Department no later than the 15th day of the month following the completed monitoring period, unless otherwise specified in this permit. Priority pollutant analysis data shall be submitted no later than forty-five (45) days following the monitoring period. Unless otherwise specified, all toxicity test data shall be submitted within 60 days after the sample date. The report(s) shall be sent to the Department of Ecology, Water Quality Permit Coordinator, 4601 N. Monroe Street, Spokane, Washington, 99205.

All laboratory reports providing data for organic and metal parameters shall include the following information: sampling date, sample location, date of analysis, parameter name, CAS number, analytical method/ number, method detection limit (MDL), laboratory practical quantitation limit (PQL), reporting units, and concentration detected. Analytical results from samples sent to a contract laboratory must have information on the chain of custody, the analytical method, QA/QC results, and documentation of accreditation for the parameter.

Discharge Monitoring Report forms must be submitted monthly whether or not the facility was discharging. If there was no discharge during a given monitoring period, submit the form as required with the words "No Discharge" entered in place of the monitoring results.

B. Records Retention

The Permittee shall retain records of all monitoring information for a minimum of three (3) years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Department.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place, method, and time of sampling or measurement;

(2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) the individual who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2 of this permit, then the results of such monitoring shall be included in the calculation and reporting of the data submitted in the Permittee's DMR.

E. Noncompliance Notification

In the event the Permittee is unable to comply with any of the terms and conditions of this permit due to any cause, the Permittee shall:

1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance, correct the problem and, if applicable, repeat sampling and analysis of any noncompliance immediately and submit the results to the Department within (30) days after becoming aware of the violation.

2. Immediately notify the Department of the failure to comply.

3. Submit a detailed written report to the Department within thirty (30) days (five [5] days for upsets and bypasses), unless requested earlier by the Department. The report shall contain a description of the noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

F. Twenty-four Hour Notice of Noncompliance Reporting

1. The permittee must report the following occurrences of noncompliance by telephone, to Ecology at (509)329-3400 or (206)553-1846 within 24 hours from the time the Permittee becomes aware of the circumstances:

   a. any noncompliance that may endanger health or the environment;
   b. any unanticipated bypass that exceeds any effluent limitation in the permit (See Part S5.F., “Bypass Procedures”);
   c. any upset that exceeds any effluent limitation in the permit (See G.15, “Upset”);
   d. any violation of a maximum daily or instantaneous maximum discharge limitation for any of the pollutants in S1.A.; or
   e. any overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limitation in the

permit. This includes overflows such as from manholes and side sewer laterals due to blockages.

2. The Permittee must also provide a written submission within five days of the time that the Permittee becomes aware of any event required to be reported under subpart 1, above. The written submission must contain:

   a. a description of the noncompliance and its cause;

   b. the period of noncompliance, including exact dates and times;

   c. the estimated time noncompliance is expected to continue if it has not been corrected;

   d. steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance; and

   e. if the non compliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.

3. Ecology may waive the written report on a case-by-case basis if the oral report has been received within 24 hours of the noncompliance.

4. Reports must be submitted to the address in S3.(“REPORTING AND RECORDKEEPING REQUIREMENTS”).

G. Other Noncompliance Reporting.

The permittee must report all instances of noncompliance, not required to be reported within 24 hours, at the time that monitoring reports for S3.A ("Reporting") are submitted. The reports must contain the information listed in paragraph E above, (“Twenty-four Hour Notice of Noncompliance Reporting”). Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

H. Maintaining a Copy of this Permit

A copy of this permit must be kept at the facility and be made available upon request to Department of Ecology inspectors.

S4. FACILITY LOADING

A. Design Criteria

The Liberty Lake Sewer District WWTP shall be permitted for the following flows and waste loadings upon submission and Department approval of the engineering report implementing the requirements of the Spokane River Dissolved Oxygen TMDL, the managed implementation plan. The following criteria are not to be exceeded:

FLOW: Annual Average: 1.8 MGD

	Maximum Month:	2.0 MGD
	Maximum Day	3.0 MGD
BOD_5	Annual Average	3,984 lbs/day
	Maximum Month:	6,294 lbs/day
	Maximum Day	9,402 lbs/day
TSS	Annual Average	4,390 lbs/day
	Maximum Month:	6,322 lbs/day
	Maximum Day	15,541 lbs/day
TP	Annual Average	89 lbs/day
	Maximum Month:	147 lbs/day
	Maximum Day	248 lbs/day
TKN	Annual Average	650 lbs/day
	Maximum Month:	975 lbs/day
	Maximum Day	1,625 lbs/day
TN	Annual Average	680 lbs/day
	Maximum Month:	1,008 lbs/day
	Maximum Day	1,675 lbs/day

The TMDL flows and loadings are based on the year 2027. The year 2027 flows are:

Annual Average:	1.50 MGD
Maximum Month:	1.67 MGD
Maximum Day	2.50 MGD

B. Plans for Maintaining Adequate Capacity

The permittee shall submit to the Department a plan and a schedule for continuing to maintain capacity when:

1. The actual flow or waste load reaches 85 percent of any one of the design criteria in S4.A for three consecutive months; or
2. When the projected increase would reach design capacity within five years,

Whichever occurs first. If such a plan is required, it shall contain a plan and schedule for continuing to maintain capacity. The capacity as outlined in this plan must be sufficient to achieve the effluent limitations and other conditions of this permit. This plan shall address any of the following actions or any others necessary to meet the objective of maintaining capacity.

1. Analysis of the present design including the introduction of any process modifications that would establish the ability of the existing facility to achieve the effluent limits and other requirements of this permit at specific levels in excess of the existing design criteria specified in paragraph A above.

2. Reduction or elimination of excessive infiltration and inflow of uncontaminated ground and surface water into the sewer system.
3. Limitation on future sewer extensions or connections or additional waste loads.
4. Modification or expansion of facilities necessary to accommodate increased flow or waste load.
5. Reduction of industrial or commercial flows or waste loads to allow for increasing sanitary flow or waste load.

Engineering documents associated with the plan must meet the requirements of WAC 173-240-060, "Engineering Report," and be approved by the Department prior to any construction. The plan shall specify any contracts, ordinances, methods for financing, or other arrangements necessary to achieve this objective.

C. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment

D. Notification of New or Altered Sources

The Permittee shall submit written notice to the Department whenever any new discharge or a substantial change in volume or character of an existing discharge into the POTW is proposed which: (1) would interfere with the operation of, or exceed the design capacity of, any portion of the POTW; (2) is not part of an approved general sewer plan or approved plans and specifications; or (3*)* would be subject to pretreatment standards under 40 CFR Part 403 and Section 307(b) of the Clean Water Act. This notice shall include an evaluation of the POTW's ability to adequately transport and treat the added flow and/or waste load, the quality and volume of effluent to be discharged to the POTW, and the anticipated impact on the Permittee's effluent [40 CFR 122.42(b)].

E. Waste load Assessment

The Permittee shall conduct an annual assessment of their flow and waste load and submit a report to the Department by March 15, 2012, and annually thereafter.

The report shall provide a statistical analysis of the facilities performance removing Total Phosphorus, BOD_5, $CBOD_5$ and ammonia on a monthly average basis, 30 day rolling average basis, seasonal average basis, and seasonal median basis.

A comparison between:

the existing and design average month flows,
the existing and design maximum month flows,
the existing and design peak day flows,
the existing and design BOD_5 mass loading,
the existing and design total suspended solids mass loadings,

the existing and design total phosphorus mass loadings and influent concentration,
the existing and design total ammonia mass loadings and influent concentration.

The report shall also state the present and design population or population equivalent, projected population growth rate, the estimated date upon which the design capacity is projected to be reached and the percentage increase in the above parameters since the last annual report.

The interval for review and reporting may be modified if the Department determines that a different frequency is sufficient.

S5. OPERATION AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

A. Certified Operator

An operator certified for at least a Class 3 plant by the state of Washington shall be in responsible charge of the day-to-day operation of the wastewater treatment plant. An operator certified for at least a Class 2 plant shall be in charge during all regularly scheduled shifts.

B. O & M Program

The Permittee shall institute an adequate operation and maintenance program for their entire sewage system. Maintenance records shall be maintained on all major electrical and mechanical components of the treatment plant, as well as the sewage system and pumping stations. Such records shall clearly specify the frequency and type of maintenance recommended by the manufacturer and shall show the frequency and type of maintenance performed. These maintenance records shall be available for inspection at all times.

C. Short-term Reduction

If a Permittee contemplates a reduction in the level of treatment that would cause a violation of permit discharge limitations on a short-term basis for any reason, and such reduction cannot be avoided, the Permittee shall give written notification to the Department, if possible, 30 days prior to such activities, detailing the reasons for, length of time of, and the potential effects of the reduced level of treatment. This notification does not relieve the Permittee of their obligations under this permit.

D. Electrical Power Failure

The Permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated wastes or wastes not treated in accordance with the requirements of this permit during electrical power failure at the treatment plant and/or sewage lift stations either by means of alternate power sources, standby generator, or retention of inadequately treated wastes.

The Permittee shall maintain Reliability Class II (EPA 430-99-74-001) at the wastewater treatment plant, which requires a backup power source sufficient to operate primary sedimentation and disinfection.

E. Prevent Connection of Inflow

The Permittee shall strictly enforce their sewer ordinances and not allow the connection of inflow (roof drains, foundation drains, etc.) to the sanitary sewer system.

F. Bypass Procedures

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited, and the Department may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, or 3) is applicable.

1. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions.

   Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health as determined by the Department prior to the bypass. The Permittee shall submit prior notice, if possible at least ten (10) days before the date of the bypass.

2. Bypass which is unavoidable, unanticipated and results in noncompliance of this permit.

   This bypass is permitted only if:

   a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

   b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.

c. The Department is properly notified of the bypass as required in condition S3E of this permit.

3. Bypass which is anticipated and has the potential to result in noncompliance of this permit

The Permittee shall notify the Department at least thirty (30) days before the planned date of bypass. The notice shall contain: (1) a description of the bypass and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) the minimum and maximum duration of bypass under each alternative; (5) a recommendation as to the preferred alternative for conducting the bypass; (6) the projected date of bypass initiation; (7) a statement of compliance with SEPA; (8) a request for modification of water quality standards as provided for in WAC 173-201A-110, if an exceedance of any water quality standard is anticipated; and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above shall be considered during preparation of the engineering report or facilities plan and plans and specifications and shall be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

The Department will consider the following prior to issuing an administrative order for this type bypass:

a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.

b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.

c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, the Department will approve or deny the request. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by the Department under RCW 90.48.120.

G. Operations and Maintenance Manual - Update

The approved Operations and Maintenance Manual shall be kept available at the treatment plant and all operators shall follow the instructions and procedures of this manual.

The current Operations and Maintenance Manual shall be reviewed and changes made that reflect the current facility. The changes shall include:

1. An index indicating which chapters of the original facility O&M Manual are no longer valid;
2. Manufacturers O&M manuals for all equipment that has been installed in place of existing facility equipment;
3. A narrative including Standard Operating Procedures for daily operation, inspection of facilities, and daily task timetable;
4. A description of process control strategy including worksheets and calculations;
5. A description of the facility's accredited laboratory operation manual and contractor lab sampling schedule.

The Permittee shall inform the Department no later than March 15, 2012 in writing, that the review and changes have been completed

The O&M Manual shall be reviewed by the Permittee at least annually. Substantial changes or updates to the O&M Manual shall be submitted to the Department for review and approval whenever they are incorporated into the manual.

S6. PRETREATMENT

A. General Requirements

The Permittee shall work with the Department to ensure that all commercial and industrial users of the publicly owned treatment works (POTW) are in compliance with the pretreatment regulations promulgated in 40 CFR Part 403 and any additional regulations that may be promulgated under Section 307(b) (pretreatment) and 308 (reporting) of the Federal Clean Water Act.

B. Wastewater Discharge Permit Required

The Permittee shall not allow significant industrial users (SIUs) to discharge wastewater to the Permittee's sewerage system until such user has received a wastewater discharge permit from the Department in accordance with Chapter 90.48 RCW and Chapter 173-216 WAC, as amended.

C. Identification and Reporting of Existing, New, and Proposed Industrial Users

1. The Permittee shall take continuous, routine measures to identify all existing, new, and proposed SIUs and potential significant industrial users (PSIUs) discharging or proposing to discharge to the Permittee's sewerage system (see Appendix B of Fact Sheet for definitions).

2. Within 30 days of becoming aware of an unpermitted existing, new, or proposed industrial user who may be an SIU, the Permittee shall notify such user by registered mail that, if classified as an SIU, they shall be required to apply to the Department and obtain a State Waste Discharge Permit. A copy of this notification letter shall also be sent to the Department within this same 30-day period.

3. The Permittee shall also notify all PSIUs, as they are identified, that if their classification should change to an SIU, they shall be required to apply to the Department for a State Waste Discharge Permit within 30 days of such change.

D. Industrial User Survey - Update

1. The Permittee shall update the Industrial User Survey and shall be submitted to the Department by **February 15, 2012**. The updated survey shall include a list of all new industrial users, as well as existing industrial users which are known or discovered to have significantly altered processes or disposal practices since submittal of the last survey or survey update. For industrial users for which there are potentially significant non-domestic discharges, the minimum information described in the Department's guidance document entitled "Performing an Industrial User Survey" for PSIUs shall be obtained and included in the report.

E. Duty to Enforce Discharge Prohibitions

1. In accordance with 40 CFR 403.5(a), the Permittee shall not authorize or knowingly allow the discharge of any pollutants into its POTW which cause pass through or interference, or which otherwise violates general or specific discharge prohibitions contained in 40 CFR Part 403.5 or WAC-173-216-060.

2. The Permittee shall not authorize or knowingly allow the introduction of any of the following into their treatment works:

   a. Pollutants which create a fire or explosion hazard in the POTW (including, but not limited to waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21).

   b. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, or greater than 11.0 standard units, unless the works are specifically designed to accommodate such discharges.

   c. Solid or viscous pollutants in amounts that could cause obstruction to the flow in sewers or otherwise interfere with the operation of the POTW.

d. Any pollutant, including oxygen demanding pollutants, (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW.

e. Petroleum oil, nonbiodegradable cutting oil, or products of mineral origin in amounts that will cause interference or pass through.

f. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity which may cause acute worker health and safety problems.

g. Heat in amounts that will inhibit biological activity in the POTW resulting in interference but in no case heat in such quantities such that the temperature at the POTW headworks exceeds 40°C (104°F) unless the Department, upon request of the Permittee, approves, in writing, alternate temperature limits.

h. Any trucked or hauled pollutants, except at discharge points designated by the Permittee.

i. Wastewaters prohibited to be discharged to the POTW by the Dangerous Waste Regulations (Chapter 173-303 WAC), unless authorized under the Domestic Sewage Exclusion (WAC 173-303-071).

3. All of the following are prohibited from discharge to the POTW unless approved in writing by the Department under extraordinary circumstances (such as a lack of direct discharge alternatives due to combined sewer service or the need to augment sewage flows due to septic conditions):

   a. Noncontact cooling water in significant volumes.

   b. Stormwater, and other direct inflow sources.

   c. Wastewaters significantly affecting system hydraulic loading, which do not require treatment, or would not be afforded a significant degree of treatment by the system.

4. The Permittee shall notify the Department if any industrial user violates the prohibitions listed in this section.

F. Monitoring Requirements

The Permittee shall monitor its influent and effluent twice during the permit cycle (June 2011 and 2014) for the priority pollutants identified in Tables II and III of Appendix D of 40 CFR Part 122 as amended using U.S. Environmental Protection Agency approved procedures for collection, preservation, storage, and analysis, as per Section S2 of this permit and the pollutants of concern identified in S6.H (Local Limits Development).

1. The POTW influent and effluent shall be sampled on a day when industrial discharges are occurring at normal to maximum levels. Samples for the analysis of acid and base/neutral extractable compounds and metals shall be 24-hour composites. Samples for the analysis of volatile organic compounds shall be collected using grab sampling techniques at equal intervals for the total of four grab samples per day.

   A single analysis for volatile pollutants (Method 624) may be run for each monitoring day by compositing equal volumes of each grab sample directly in the GC purge and trap apparatus in the laboratory, with no less than 1 ml of each grab included in the composite.

   Unless otherwise indicated, all reported test data for metals shall represent the total amount of the constituent present in all phases, whether solid, suspended, or dissolved, elemental or combined including all oxidation states.

   Wastewater samples must be handled, prepared, and analyzed by GC/MS in accordance with the U.S. EPA Methods 624 and 625 (October 26, 1984).

2. A sludge sample shall be collected concurrent with a wastewater sample and may be taken as a single grab of residual sludge. Sampling and analysis shall conform to U.S. EPA Methods 624 and 625 unless the Permittee requests an alternate method and it has been approved by the Department.

3. Cyanide, phenols, and oils shall be taken as grab samples. Oils shall be hexane soluble or equivalent, and should be measured in the influent and effluent only.

4. In addition to quantifying pH, oil and grease, and all priority pollutants, a reasonable attempt should be made to identify all other substances and quantify all pollutants shown to be present by gas chromatograph/mass spectrometer (GC/MS) analysis per 40 CFR 136, Appendix A, Methods 624 and 625. Determinations of pollutants should be attempted for each fraction, which produces identifiable spectra on total ion plots (reconstructed gas chromatograms). Determinations should be attempted from all peaks with responses 5% or greater than the nearest internal standard. The 5% value is based on internal standard concentrations of 30 µg/l, and must be adjusted downward if higher internal standard concentrations are used or adjusted upward if lower internal standard concentrations are used. Non-substituted aliphatic compounds may be expressed as total hydrocarbon content.

   Identification shall be attempted by a laboratory whose computer data processing programs are capable of comparing sample mass spectra to a computerized library of mass spectra, with visual confirmation by an experienced analyst. For all detected substances which are determined to be pollutants, additional sampling and appropriate testing shall be conducted to determine concentration and variability, and to evaluate trends.

G. Reporting of Monitoring Results

The Permittee shall include a summary of monitoring results in the Annual Wasteload Assessment Report; Section S4.E.

H. Local Limit Development

The Permittee shall, in consultation with the Department, evaluate their local limits in order to prevent pass through or interference. The Permittee shall establish new local limits or revise existing local limits as required by 40 CFR 403.5 by **June 15, 2012.** The Local Limits Development Guidance Manual dated July 2004 from Environmental Protection Agency is available for establishing the local limits. The Permittee needs to ensure that they evaluate the pollutants of concern. The minimum pollutants of concerns are arsenic, cadmium, chromium, copper, cyanide, lead, mercury, nickel, silver, zinc, molybdenum, selenium, Biochemical Oxygen Demand, Total Suspended Solids, phosphorus, and ammonia. In addition, the Department may require revision or establishment of local limits for any pollutant discharged from the POTW that has a reasonable potential to exceed the Water Quality Standards, Sediment Standards, or established effluent limits, or causes whole effluent toxicity. The determination by the Department shall be in the form of an Administrative Order.

The Department may modify this permit to incorporate additional requirements relating to the establishment and enforcement of local limits for pollutants of concern. Any permit modification is subject to formal due process procedures pursuant to state and federal law and regulation.

I. Local Sewer Ordinance

The Permittee shall update and approve their local sewer ordinance and submit it to the Department by **October 15, 2012**. This update should reflect the 40 CFR 403 changes that occurred in 2006 on Pretreatment Streamlining. The update should include any changes that might occur from Local Limitations Development (S6.H.) and any other changes that are needed. The State of Washington's draft sewer user ordinance is available for this update.

S7. RESIDUAL SOLIDS

Residual solids include screenings, grit, scum, primary sludge, waste activated sludge, and other solid waste. The Permittee shall store and handle all residual solids in such a manner so as to prevent their entry into state ground or surface waters. The Permittee shall not discharge leachate from residual solids to state surface or ground waters.

S8. ACUTE TOXICITY

A. Effluent Characterization

The Permittee shall conduct acute toxicity testing on the final effluent to determine the presence and amount of acute (lethal) toxicity. The two acute toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

Effluent characterization for acute toxicity shall be conducted six (6) times (April, July, and October) during the permit cycle during the 2012 and 2014 years. Acute toxicity testing shall follow protocols, monitoring requirements, and quality assurance/quality control procedures specified in this section. A dilution series consisting of a minimum of five concentrations and a control shall be used to estimate the concentration lethal to 50% of the organisms (LC_{50}). The percent survival in 100% effluent shall also be reported.

A written report shall be submitted to the Department within 60 days after the sample date. This report shall include a tabulated summary of the individual test results and any information on sources of toxicity, toxicity source control, correlation with effluent data, and toxicity treatability which is developed during the period of testing.

Acute toxicity tests shall be conducted with the following species and protocols:

1. Fathead minnow, *Pimephales promelas* (96 hour static-renewal test, method: EPA/600/4-90/027F).

2. Daphnid, *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (48 hour static test, method: EPA/600/4-90/027F). The Permittee shall choose one of the three species and use it consistently throughout effluent characterization.

B. Effluent Limit for Acute Toxicity

The Permittee has an effluent limit for acute toxicity if, after completing the effluent characterization, either:

(1) The median survival of any species in 100% effluent is below 80%, or

(2) Any one test of any species exhibits less than 65% survival in 100% effluent.

If an effluent limit for acute toxicity is required by subsection B at the end of the effluent characterization, the Permittee shall immediately complete all applicable requirements in subsections C, D, and F.

If no effluent limit is required by subsection B at the end of the effluent characterization, then the Permittee shall complete all applicable requirements in subsections E and F.

The effluent limit for acute toxicity is no acute toxicity detected in a test concentration representing the acute critical effluent concentration (ACEC).

In the event of failure to pass the test described in subsection C of this section for compliance with the effluent limit for acute toxicity, the Permittee is considered to be in compliance with all permit requirements for acute whole effluent toxicity as long as the requirements in subsection D are being met to the satisfaction of the Department.

The ACEC means the maximum concentration of effluent during critical conditions at the boundary of the zone of acute criteria exceedance assigned pursuant to WAC 173-201A-100. The zone of acute criteria exceedance is authorized in Section S1 of this permit. The ACEC equals 45% effluent.

If the Permittee has an effluent limit for acute toxicity and the ACEC is not known, then effluent characterization for acute toxicity shall continue until the time an ACEC is known. Effluent characterization shall be continued until an ACEC has been determined and shall be performed using each one of the tests listed in subsection A on a rotating basis. When an ACEC has been determined, the Permittee shall immediately complete all applicable requirements in subsections C, D, and F.

If no effluent limit is required by subsection B at the end of the effluent characterization, then the Permittee shall stop effluent characterization and begin to conduct the activities in subsection E even if the ACEC is unknown.

C. Monitoring for Compliance With an Effluent Limit for Acute Toxicity

Monitoring to determine compliance with the effluent limit shall be conducted quarterly for the remainder of the permit term using the Fathead minnow, *Pimephales promelas* listed in subsection A and performed using at a minimum 100% effluent, the ACEC (45% effluent), and a control. The percent survival in 100% effluent shall be reported for all compliance monitoring.

Compliance with the effluent limit for acute toxicity means no statistically significant difference in survival between the control and the test concentration representing the ACEC. The Permittee shall immediately implement subsection D if any acute toxicity test conducted for compliance monitoring determines a statistically significant difference in survival between the control and the ACEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in survival between the control and the ACEC is less than 10%, the hypothesis test shall be conducted at the 0.01 level of significance.

D. Response to Noncompliance With an Effluent Limit for Acute Toxicity

If the Permittee violates the acute toxicity limit in subsection B, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted weekly for four consecutive weeks using the same test and species as the failed compliance test. Testing shall determine the LC_{50} and effluent limit compliance. The discharger shall return to the original monitoring frequency in subsection C after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from the Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for acute toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by the Department that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to the Department on possible causes and preventive

measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the acute toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department. The TI/RE plan submittal shall be within 60 days after the sample date for the fourth additional compliance monitoring test. If the Permittee decides to forgo the rest of the additional compliance monitoring tests required in this subsection because one of the first three additional compliance monitoring tests failed to meet the acute toxicity limit, then the Permittee shall submit the TI/RE plan within 60 days after the sample date for the first additional monitoring test to violate the acute toxicity limit. The TI/RE plan shall be based on WAC 173-205-100(2) and shall be implemented in accordance with WAC 173-205-100(3).

E. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.

2. Testing shall be conducted on 24-hour composite effluent samples. Composite samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. All samples must be below 8° C at receipt. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended. The lab shall store all samples at 4° C in the dark from receipt until completion of the test.

3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.

4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A and the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.

5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.

6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.

7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC (45% effluent).

8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing, and do not comply with the acute statistical power standard of 29% as defined in WAC 173-205-020, must be repeated on a fresh sample with an increased number of replicates to increase the power.

S9. CHRONIC TOXICITY

A. Effluent Characterization

The Permittee shall conduct chronic toxicity testing on the final effluent. The two chronic toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

Testing shall be conducted during the year 2012 and 2014 of the permit. A written report shall be submitted to the Department no later than 60 days from the sampling date. This report shall include a tabulated summary of the individual test results and any information on sources of toxicity, toxicity source control, correlation with effluent data, and toxicity treatability which is developed during the period of testing.

Effluent testing for chronic toxicity shall be conducted six (6) times (April, July, and October) during the permit cycle during the 2012 and 2014 years. The Permittee shall conduct chronic toxicity testing during effluent characterization on a series of at least five concentrations of effluent in order to determine appropriate point estimates. This series of dilutions shall include the ACEC (45% effluent). The Permittee shall compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.

Chronic toxicity tests shall be conducted with the following two species and the most recent version of the following protocols:

Freshwater Chronic Toxicity Test Species		Method
Fathead minnow	*Pimephales promelas*	EPA/600/4-91/002
Water flea	*Ceriodaphnia dubia*	EPA/600/4-91/002

B. Effluent Limit for Chronic Toxicity

After completion of effluent characterization, the Permittee has an effluent limit for chronic toxicity if any test conducted for effluent characterization shows a significant difference between the control and the ACEC at the 0.05 level of significance using

hypothesis testing (Appendix H, EPA/600/4-89/001) and shall complete all applicable requirements in subsections C, D, and F.

If no significant difference is shown between the ACEC and the control in any of the chronic toxicity tests, the Permittee has no effluent limit for chronic toxicity and only subsections E and F apply.

The effluent limit for chronic toxicity is no toxicity detected in a test concentration representing the chronic critical effluent concentration (CCEC).

In the event of failure to pass the test described in subsection C, of this section, for compliance with the effluent limit for chronic toxicity, the Permittee is considered to be in compliance with all permit requirements for chronic whole effluent toxicity as long as the requirements in subsection D are being met to the satisfaction of the Department.

The CCEC means the maximum concentration of effluent allowable at the boundary of the mixing zone assigned in Section S1. pursuant to WAC 173-201A-100. The CCEC equals 5% effluent.

After completion of effluent characterization, the Permittee has an effluent limit for chronic toxicity if any test conducted under subsection A results in an NOEC less than the ACEC or if any test shows a significant difference between the control and the ACEC at the 0.05 level of significance using hypothesis testing (Appendix H, EPA/600/4-89/001). The Permittee shall complete all applicable requirements in subsections C, D, and F upon determining that an effluent limit for chronic toxicity applies to the discharge.

If no test resulted in a NOEC less than the ACEC or if no significant difference is shown between the ACEC and the control in any of the chronic toxicity tests, the Permittee has no effluent limit for chronic toxicity and only subsections E and F apply.

The effluent limit for chronic toxicity is no toxicity detected in a test concentration representing the chronic critical effluent concentration (CCEC).

C. Monitoring for Compliance With an Effluent Limit for Chronic Toxicity

Monitoring to determine compliance with the effluent limit shall be conducted quarterly for the remainder of the permit term using each of the species listed in subsection A on a rotating basis and performed using at a minimum the CCEC, the ACEC, and a control. The Permittee shall schedule the toxicity tests in the order listed in the permit unless the Department notifies the Permittee in writing of another species rotation schedule.

Compliance with the effluent limit for chronic toxicity means no statistically significant difference in response between the control and the test concentration representing the CCEC. The Permittee shall immediately implement subsection D if any chronic toxicity test conducted for compliance monitoring determines a statistically significant difference in response between the control and the CCEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in

response between the control and the CCEC is less than 20%, the hypothesis test shall be conducted at the 0.01 level of significance.

In order to establish whether the chronic toxicity limit is eligible for removal from future permits, the Permittee shall also conduct this same hypothesis test (Appendix H, EPA/600/4-89/001) to determine if a statistically significant difference in response exists between the ACEC and the control.

D. Response to Non-compliance With an Effluent Limit for Chronic Toxicity

If a toxicity test conducted for compliance monitoring under subsection C determines a statistically significant difference in response between the CCEC and the control, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted monthly for three consecutive months using the same test and species as the failed compliance test. Testing shall be conducted using a series of at least five effluent concentrations and a control in order to be able to determine appropriate point estimates. One of these effluent concentrations shall equal the CCEC and be compared statistically to the nontoxic control in order to determine compliance with the effluent limit for chronic toxicity as described in subsection C. The discharger shall return to the original monitoring frequency in subsection C after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from the

Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for chronic toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by the Department that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to the Department on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the chronic toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department. The TI/RE plan submittal shall be within 60 days after the sample date for the third additional compliance monitoring test. If the Permittee decides to forgo the rest of the additional compliance monitoring tests required in this subsection because one of the first two additional compliance monitoring tests failed to meet the chronic toxicity limit, then the Permittee shall submit the TI/RE plan within 60 days after the sample date for the first additional monitoring test to violate the chronic toxicity limit. The TI/RE plan shall be based on WAC 173-205-100(2) and shall be implemented in accordance with WAC 173-205-100(3).

E. Monitoring When There Is No Permit Limit for Chronic Toxicity

The Permittee shall test final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal. All species used in the initial chronic effluent characterization or substitutes approved by the Department shall be used and results submitted to the Department as a part of the permit renewal application process.

F. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.

2. Testing shall be conducted on 24-hour composite effluent samples. Composite samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. All samples must be below 8° C at receipt by the lab. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended. The lab shall store all samples at 4° C in the dark from receipt until completion of the test.

3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.

4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A and the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.

5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.

6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.

7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC (45% effluent) and the CCEC (5% effluent).

8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing, and do not comply with the chronic statistical power standard of 39% as defined in WAC 173-205-020, must be repeated on a fresh sample with an increased number of replicates to increase the power.

S10. RECLAMATION AND REUSE

A. Reclamation and Reuse Pilot and Demonstration Projects

When the permittee proposes a small scale pilot project for demonstration of concept and feasibility the permittee must submit an engineering report (following the requirements of WAC 173-240 and WAC 173-219, once adopted) describing the project. The report must describe the project with appropriate design and operational detail and must be submitted to both the Departments of Health and Ecology for review and approval. The permittee will maintain communications with the Departments of Health and Ecology and assist them in providing oversight of the concept and project feasibility and possible long term implementation.

B. Reclaimed Water Limitations (Reserved for Future Use)

C. Reclaimed Water Monitoring Requirements (Reserved for Future Use)

D. Reclamation and Reuse Implementation

For long term implementation of reclamation and reuse pilot projects, this permit will be reopened and modified as necessary to provide special conditions related to reclamation and reuse as provided by permit General Condition G3.B.3.

The permittee must prepare a water reuse plan, which contains a summary description of the proposed water reuse system as described in the approved Engineering Report. The plan and an application for permit modification must be submitted to the Departments of Health and Ecology at least 180 days before the reclamation and reuse project becomes operational. The engineering report and reuse plan must meet the requirements of the state of Washington's "Water Reclamation and Reuse Standards (1997)" and be approved by both the

Departments of Health and the Department of Ecology prior to the construction or modification of facilities for producing reclaimed water.

The Permittee must review the plan at least annually and the plan must be updated whenever new uses or users are added to the distribution system. A copy of the revised plan must be submitted to Ecology and Health. The plan must contain, but not be limited to, the following:

1. Description of the reuse distribution system;
2. Identification of uses, users, location of reuse sites.
3. Evaluation of reuse sites, estimated volume of reclaimed water use, means of application, and for irrigation or surface percolation uses, the application rates, water balance, expected agronomic uptake, potential to impact ground water or surface water at the site, background water quality and hydrogeological information necessary to evaluate potential water quality impacts.

E. Bypass Prohibited

There must be no bypassing of untreated or partially treated wastewater from the reclamation plant or any intermediate unit processes to the distribution system or point of use at any time. All reclaimed water being distributed for beneficial use must meet Class A requirements at all times. Water not meeting Class A must be retained for additional treatment by diversion to a bypass storage lagoon or discharged to an authorized wastewater outfall.

The Departments of Ecology and Health must be notified by telephone within 24 hours of any diversion to a bypass storage lagoon or authorized outfall. Substandard wastewater must not be discharged to the reclaimed water distribution system or use areas without specific approval from the Departments of Health and Ecology.

F. Reliability

The Permittee must maintain the highest reliability class as described in the Water Reclamation and Reuse Standards which require one of the following features for each of the critical reclamation treatment unit processes of oxidation, coagulation, filtration and disinfection:

1. Alarms and standby power source
2. Alarms and automatically actuated short-term (24-hour) storage or disposal provisions.
3. Automatically actuated long-term storage or disposal provisions for treated wastewater.

G. Use Area Responsibilities

1. A standard notification sign must be developed by the Permittee using colors and verbiage approved by the state Department of Health. The signs must be used in all reclaimed water use areas, consistent with the Water Reclamation and Reuse Standards.
2. Reclaimed water use, including runoff and spray must be confined to the designated and approved use area. The incidental discharge of reclaimed water to waters of the State is not a violation of these requirements if the incidental discharge does not unreasonably affect the beneficial uses of the water, and does not result in exceeding an applicable water quality objective in the receiving water.
3. The Permittee must control industrial and toxic discharges to the sanitary sewer that may affect reclaimed water quality through either a delegated pretreatment program with the Department of Ecology or assuring all applicable discharges have permits issued under the Water Pollution Control Act, Chapter 90.48 RCW, and the State Waste Discharge Permit Regulation, Chapter 173-216 WAC.
4. Where the reclaimed water production, distribution and use areas are under direct control of the permittee, the Permittee must maintain control and be responsible for all facilities and activities inherent to the production, distribution and use of the reclaimed water. The Permittee must ensure that the reuse system operates as approved by the Departments of Health and Ecology.

H. Service and Use Area Agreement

Where the reclaimed water additional treatment, distribution system or use area is not under direct control of the permittee:

1. The person(s) who provides additional treatment, distributes, owns, or otherwise maintains control over the reclaimed water use area is responsible for reuse facilities and activities inherent to the production, distribution and use of the reclaimed water to ensure that the system operates as approved by the Departments of Health and Ecology in accordance with this Permit.
2. Reclaimed water uses, including runoff and spray, must be confined to the designated and approved use areas. The incidental discharge of reclaimed water to waters of the State is not a violation of these requirements if the incidental discharge does not unreasonably affect the beneficial uses of the water, and does not result in exceeding an applicable water quality objective in the receiving water.
3. A binding Service and Use Area Agreement among the parties involved is required to ensure that construction, operation, maintenance, and monitoring meet all requirements of the Departments of Health and Ecology. This agreement must be consistent with the requirements of the Water Reclamation and Reuse Standards, 1997. A copy of each Service and Use Area Agreement

must be submitted to and approved by the Departments of Health and Ecology prior to implementation.

4. The Service and Use Area Agreement must provide the Permittee with authority to terminate service of reclaimed water to a customer violating the State Water Reclamation and Reuse Standards and restrictions outlined in the Service and Use Area Agreement. The Service and Use Area Agreements must be approved by the Departments of Health and Ecology prior to the distribution of any reclaimed water.

5. No reclaimed water is to be distributed by the Permittee without a reclaimed water service and use agreement approved by the Departments of Health and Ecology.

I. Reclaimed Water Ordinance

The Permittee must complete a local ordinance to include policies and procedures for the distribution and delivery of reclaimed water. The ordinance must be submitted on or before **July 30, 2012**. The ordinance must provide the Permittee with the authority to terminate service of reclaimed water from any customer violating the state Water Reclamation and Reuse Standards and restrictions outlined in the service and use agreement.

J. Irrigation Use

1. For any irrigation use of reclaimed water, the hydraulic loading rate of reclaimed water must be determined based on a detailed water balance analysis. The calculated loading rate(s) and the parameters and methods used to determine the loading rate(s) must be submitted to the Washington Department of Ecology for approval.

2. There must be no runoff of reclaimed water applied to land by spray irrigation to any surface waters of the state or to any land not authorized by approved use agreement.

3. There must be no application of reclaimed water for irrigation purposes when the ground is saturated or frozen.

4. The reclaimed water must not be applied to the irrigation lands in quantities that:

   a. Significantly reduce or destroy the long-term infiltration rate of the soil.

   b. Cause long-term anaerobic conditions in the soil.

   c. Cause ponding of reclaimed water and produce objectionable odors or support insects or vectors.

   d. Cause leaching losses of constituents of concern beyond the treatment zone or in excess of the approved design. Constituents of concern are constituents in the reclaimed water, partial decomposition products, or

soil constituents that would alter ground water quality in amounts that would affect current and future beneficial uses.

The Permittee must maintain all irrigation agreements for lands not owned for the duration of the permit. The Permittee must inform the Departments of Health and Ecology in writing of any proposed changes to existing agreements.

S11. COMPLIANCE SCHEDULE

The following compliance schedule is to implement the Spokane River and Lake Spokane Dissolved Oxygen Total Maximum Daily Load (TMDL), its waste load allocation and the Managed Implementation Plan." The Department acknowledges that, depending on how the environment responds to these actions the model results coming out of the "10 year assessment" may yield revised final equivalent effluent limitations (see Section 303(d)(4)(A) of the Clean Water Act).

The Department also acknowledges that the following schedule may need to be amended in the future. Any request must be based on new information including progress made and appropriate justification. Any modification to the compliance schedule would be made pursuant to 40 CFR 122.62 or122.63, as appropriate.

A. Engineering Report Update

No later than **October 30, 2012**, an approvable Engineering Report (update) must be prepared by the Permittee in accordance with WAC 173-240 and submitted to the Department for review and approval. The Engineering Report shall address the wastewater treatment processes needed to reliable comply with the $CBOD_5$, NH_3 and TP WLAs of the Spokane River and Lake Spokane Dissolved Oxygen TMDL, provide site options and piping and process options for future addition of process elements to achieve the final equivalent effluent limitations and water reclamation requirements as described in Chapter 173-219 WAC "Reclaimed Water Use." A hydrogeological evaluation of the impact of reuse water on the aquifer must be included in the Engineering Report (update).

The Engineering Report is to address the following topics based on rule requirements, pollutant equivalency consideration, potential for offset creation and management including trading, etc:

1) population projections by year for the next 20 years,
2) loading projections, flow, TP, CBOD, Ammonia, and TN;
3) wastewater treatment processes needed to reliable comply with the $CBOD_5$, NH_3 and TP WLAs of the Spokane River and Lake Spokane Dissolved Oxygen TMDL; including loadings potentially bypassed in a "blending event," and requiring an offset or pollutant equivalency consideration;
4) projection of loading removed for TP, CBOD, Ammonia, and TN;

5) projection of offset(s) and other actions needed for compliance with DO TMDL that reduce TP, CBOD and ammonia loadings to the final effluent and the river,
6) options considered to generate offset(s),
7) recommended offset option and/or other actions (such as water reclamation and offset generating options if projected to be needed)
8) timeline of offsets and other DO compliance actions to be needed and implementation schedule to achieve DO TMDL compliance,
9) site options and process options for future addition of process elements and offset generating activities to achieve the final equivalent effluent limitations and water reclamation requirements as described in Chapter 173-219 WAC "Reclaimed Water Use."
10) establish a ratio of total phosphorus (TP) to total reactive phosphorus (TRP) and a ratio of total reactive phosphorus (TRP) to bio-available phosphorus.
11) findings from the University of Washington / WERF bioavailability lab study.
12) subsequent monitoring and modeling of bioavailable phosphorus impacts in Lake Spokane.
13) the pounds of phosphorus that are not bio-available, not reactive and not a nutrient source that contribute to the total phosphorus waste load allocation
14) recommended adjustment potentially made to the effluent limitations needed for compliance with the DO TMDL because of non bio-available phosphorus in the effluent,
15) The plan update, in combination with the pollutant reduction from technology, shall provide reasonable assurance of meeting the Permittee's Waste Load Allocations in ten (10) years.

B. Project Manual (Plans and Specifications)

No later than **October 1, 2014** the Permittee must submit to the Department for review and approval two copies of approvable plans and specifications in accordance with WAC 173-240 for upgrade of the existing wastewater treatment plant.

C. Construction Quality Assurance Plan

Prior to the start of construction, the Permittee must submit to the Department a quality assurance plan as required by WAC 173-240.

D. Verification of Construccction and Start Up Completion of Facilities for Compliance with Spokane River DO TMDL

No later than **March 1, 2018** the Permittee must submit a verification that the selected technology(s) have been installed and are optimally functional and ready to comply with the effluent limitations presented in permit conditions S1.B and be continuously operating.

S12. RECEIVING WATER AND EFFLUENT STUDY

A. General Requirements

The Permittee must conduct analyses of the receiving water and the wastewater facility's influent and effluent samples as listed in permit section S2. and collected in accordance with protocols, monitoring requirements, and QA/QC procedures specified in this section.

Raw sewage from the collection system and headworks and effluent samples must be analyzed for:

1. PCBs, 2,3,7,8 TCDDs and PBDE at the locations and at the minimum frequencies listed in the schedule in S2.

2. A report of the monitoring results with attached laboratory data sheets shall be submitted to Ecology (ERO Water Quality Program permit manager and the urban waters staff) annually. After each year of sampling for PCBs; 2,3,7,8 TCDDs and PBDE; the permittee and Ecology (ERO Water Quality Program permit manager and the urban waters staff) will review the data, including pattern analysis of homologs, detection limits, QA/QC procedures and a draft action plan (The Toxics Management Plan) listing identified sources, potential sources suggested by data analysis and future source identification activities. Annually the permittee and Ecology will confer and revise the locations and frequency of the raw sewage sampling in the collection system for these pollutants.

   The Toxics Management Plan must address source control and elimination of PCBs from:

   Contaminated soils and sediments,

   Storm water entering the wastewater collection system,

   Industrial and commercial sources,

   By means of eliminating active sources such as,

   Older mechanical machinery,

   Older electrical equipment and components,

   Construction material content such as paints and caulking
   Commercial materials such as ink and dyes.

   By means of changing District and City procurement practices and ordinances control and minimize toxics, including preferential use of PCB free substitutes or those products containing PCBs below the regulated level of 5 ppm, in sources such as:

   Construction material content such as paints and caulking,
   Commercial materials such as ink and dyes,
   Soaps and cleaners.

The Permittee (individually or in collaboration with other dischargers) must also prepare public media educating the public about the difference between products free of PCBs and those labeled non-PCB but which contain PCBs below the TOSCA regulatory threshold of 5 ppm.

The effluent monitoring results shall be compiled and analyzed by Ecology for the purpose of establishing a performance based PCB effluent limitation for the following permit cycle.

The goals of the Toxics Management Plan are:

- to reduce toxicant loadings, including PCBs, to the Spokane River to the maximum extent practicable realizing statistically significant reductions in the influent concentration of toxicants to the Liberty Lake Wastewater Treatment Facility over the next 10 years.
- Reduce PCBs in the effluent to the maximum extent practicable to bring the Spokane River into compliance with applicable water quality standards for PCBs.

3. Temperature per the schedule in S2.

B. Protocols

PCBs, 2,3,7,8 TCDDs and PBDE sampling and analysis must be accordance with the quality assurance plan and scope of work submitted to the Department of Ecology. The Permittee's quality assurance plan can use the quality assurance plan of Ecology's Urban Toxics Team for a starting point and submit the District's draft for review and approval **no later than October 15, 2011**. The quality assurance plan will be reviewed annually and revised if needed.

Temperature must be monitored using micro-recording temperature devices known as thermistors. Ecology's Quality Assurance Project Plan Development Tool (*Continuous Temperature Sampling Protocols for the Environmental Monitoring and Trends*) contains protocols for continuous temperature sampling. This document is available online at http://www.ecy.wa.gov/programs/eap/qa/docs/QAPPtool/Mod6%20Ecology%20SOPs/Protocols/ContinuousTemperatureSampling.pdf. Calibration as specified in this document is not required if the permittee uses recording devices which are certified by the manufacturer. Ecology does not require manufacture-specific equipment as given in this document, however, if the Permittee wishes to use measuring devices from another company the accuracy must be demonstrated to be equivalent. The recording devices must be set to record at one-half hour intervals. Data submission can be electronic format such as an excel spread sheet including calculation of 7 day average and maximums.

The Quality Assurance Project Plan for temperature must be submitted for review and approval **no later than March 15, 2012**.

C. Quality Assurance/Quality Control Procedures

The Permittee must conduct all sampling and analysis in accordance with the guidelines given in ***Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies***, Ecology Publication 04-03-030 (http://www.ecy.wa.gov/pubs/0403030.pdf).

S13. Regional Toxics Task Force

The permittee must participate in a cooperative effort to create a Regional Toxics Task Force and participate in the functions of the Task Force. The Task Force membership should include NPDES permittees in the Spokane River basin, conservation and environmental interests, the Spokane Tribe, Spokane Regional Health District, Ecology, and other appropriate interests. The goal of the Task Force will be to develop a comprehensive plan to bring the Spokane River into compliance with applicable water quality standards for PCBs.

To accomplish that goal it is anticipated that the Task Force functions will include:

(1) Identify data gaps and collect necessary data on PCBs and other toxics on the 2008 year 303(d) list for the Spokane River;
(2) Further analyze the existing and future data to better characterize the amounts, sources, and locations of PCBs and other toxics on the 2008 year 303(d) list for the Spokane River;
(3) Prepare recommendations for controlling and reducing the sources of listed toxics in the Spokane River;
(4) Review proposed Toxic Management Plans, Source Management Plans, and BMPs;
(5) Monitor and assess the effectiveness of toxic reduction measures;
(6) Identify a mutually agreeable entity to serve as the clearinghouse for data, reports, minutes, and other information gathered or developed by the Task Force and its members. This information shall be made publicly available by means of a website and other appropriate means;

To discharge these functions the Task Force may:

- Provide for an independent community technical advisor(s) funded by the permittees, who shall assist in review of data, studies, and control measures, as well as assist in providing technical education information to the public;

By November 30, 2011, the permittee shall provide Ecology with the details of the organizational structure, specific goals, funding and the governing documents of the Regional Toxics Task Force.

If Ecology determines the Task Force is failing to make measurable progress toward meeting applicable water quality criteria for PCBs, Ecology would be obligated to proceed with development of a TMDL in the Spokane River for PCBs or determine an alternative to ensure water quality standards are met.

S14. APPLICATION FOR PERMIT RENEWAL

The Permittee must submit an application for renewal of this permit by **December 15, 2015**.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Department shall be signed and certified.

A. All permit applications shall be signed by either a principal executive officer or a ranking elected official.

B. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the Department.

2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph B.2 above must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

D. Certification. Any person signing a document under this section shall make the following certification:

> I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

G2. RIGHT OF INSPECTION AND ENTRY

The Permittee shall allow an authorized representative of the Department, upon the presentation of credentials and such other documents as may be required by law:

A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.

B. To have access to and copy - at reasonable times and at reasonable cost - any records required to be kept under the terms and conditions of this permit.

C. To inspect - at reasonable times - any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.

D. To sample or monitor - at reasonable times - any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

G3. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon the Department's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:

1. Violation of any permit term or condition.

2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.

3. A material change in quantity or type of waste disposal.

4. A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination [40 CFR part 122.64(3)].

5. A change in any condition that requires either a temporary or permanent reduction, or elimination of any discharge or sludge use or disposal practice controlled by the permit [40 CFR part 122.64(4)].

6. Nonpayment of fees assessed pursuant to RCW 90.48.465.

7. Failure or refusal of the permittee to allow entry as required in RCW 90.48.090.

B. The following are causes for modification but not revocation and reissuance except when the permittee requests or agrees:

1. A material change in the condition of the waters of the state.

2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.

3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.

4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.

5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR part 122.62.

6. The Department has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.

7. Incorporation of an approved local pretreatment program into a municipality's permit.

C. The following are causes for modification or alternatively revocation and reissuance:

1. Cause exists for termination for reasons listed in A1 through A7 of this section, and the Department determines that modification or revocation and reissuance is appropriate.

2. The Department has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G8) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new permittee.

G4. REPORTING PLANNED CHANGES

The Permittee shall, as soon as possible, but no later than sixty (60) days prior to the proposed changes, give notice to the Department of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: 1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); 2) a significant change in the nature or an increase in quantity of pollutants discharged; or 3) a significant change in the Permittee's sludge use or disposal practices. Following such notice, and the submittal of a new application or supplement to the existing application, along with required engineering plans and reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation of the terms and conditions of this permit.

G5. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications shall be submitted at least one hundred eighty (180) days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities shall be constructed and operated in accordance with the approved plans.

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G7. DUTY TO REAPPLY

The Permittee shall apply for permit renewal at least 180 days prior to the specified expiration date of this permit.

G8. TRANSFER OF THIS PERMIT

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Department.

A. Transfers by Modification

Except as provided in paragraph (B) below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

B. Automatic Transfers

This permit may be automatically transferred to a new Permittee if:

1. The Permittee notifies the Department at least 30 days in advance of the proposed transfer date.

2. The notice includes a written agreement between the existing and new Permittees containing a specific date transfer of permit responsibility, coverage, and liability between them.

3. The Department does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under this subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

G9. REDUCED PRODUCTION FOR COMPLIANCE

The Permittee, in order to maintain compliance with its permit, shall control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

G10. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

G11. DUTY TO PROVIDE INFORMATION

The Permittee shall submit to the Department, within a reasonable time, all information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also submit to the Department upon request, copies of records required to be kept by this permit.

G12. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G13. ADDITIONAL MONITORING

The Department may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G14. PAYMENT OF FEES

The Permittee shall submit payment of fees associated with this permit as assessed by the Department.

G15. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars ($10,000) and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars ($10,000) for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

G16. UPSET

Definition – "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in condition S3.E; and 4) the Permittee complied with any remedial measures required under S5 of this permit.

In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G17. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G18. DUTY TO COMPLY

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

G19. TOXIC POLLUTANTS

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G20. PENALTIES FOR TAMPERING

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment shall be a fine of not more than $20,000 per day of violation, or by imprisonment of not more than four (4) years, or by both.

G21. REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee shall give advance notice to the Department by submission of a new application or supplement thereto at least one hundred and eighty (180) days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during noncritical water quality periods and carried out in a manner approved by the Department.

G22. REPORTING OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Department, it shall promptly submit such facts or information.

G23. COMPLIANCE SCHEDULES

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.

APPENDIX A

EFFLUENT CHARACTERIZATION FOR POLLUTANTS
THIS LIST INCLUDES EPA REQUIRED POLLUTANTS (PRIORITY POLLUTANTS) AND SOME ECOLOGY PRIORITY TOXIC CHEMICALS (PBTs)

The following table specifies analytical methods and levels to be used for effluent characterization in NPDES and State waste discharge permits. This appendix specifies effluent characterization requirements of the Department of Ecology unless other methods are specified in the body of this permit.

This permit specifies the compounds and groups of compounds to be analyzed. Ecology may require additional pollutants to be analyzed within a group. The objective of this appendix is to reduce the number of analytical "non-detects" in permit-required monitoring and to measure effluent concentrations near or below criteria values where possible at a reasonable cost. If a Permittee knows that an alternate, less sensitive method (higher DL and QL) from 40 CFR Part 136 is sufficient to produce measurable results in their effluent, that method may be used for analysis.

Pollutant & CAS No. *(if available)*	**Recommended Analytical Protocol**	**Detection (DL)[1]** ***µg/L unless specified***	**Quantitation Level (QL)[2]** ***µg/L unless specified***
CONVENTIONALS			
Biochemical Oxygen Demand	SM5210-B		2 mg/L
Chemical Oxygen Demand	SM5220-D		10 mg/L
Total Organic Carbon	SM5310-B/C/D		1 mg/L
Total Suspended Solids	SM2540-D		5 mg/L
Total Ammonia (as N)	SM4500-NH3-GH		0.3 mg/L
Flow	Calibrated device		
Dissolved oxygen	4500-OC/OG		0.2 mg/L
Temperature (max. 7-day avg.)	Analog recorder or Use micro-recording devices known as thermistors		0.2º C
pH	SM4500-H^+ B	N/A	N/A
NONCONVENTIONALS			
Total Alkalinity	SM2320-B		5 mg/L as CaCo3
Chlorine, Total Residual	4500 Cl G		50.0
Color	SM2120 B/C/E		10 color unit
Fecal Coliform	SM 9221D/E,9222	N/A	N/A
Fluoride (16984-48-8)	SM4500-F E	25	100
Nitrate-Nitrite (as N)	4500-NO3- E/F/H		100
Nitrogen, Total Kjeldahl (as N)	4500-NH3-C/E/FG		300

Pollutant & CAS No. *(if available)*	**Recommended Analytical Protocol**	**Detection (DL)[1] *µg/L unless specified***	**Quantitation Level (QL) [2] *µg/L unless specified***
Ortho-Phosphate (PO_4 as P)	4500- PE/PF	3	10
Phosphorus, Total (as P)	4500-PE/PF	3	10
Oil and Grease (HEM)	1664A	1,400	5,000
Salinity	SM2520-B		3 PSS
Settleable Solids	SM2540 -F		100
Sulfate (as mg/L SO_4)	SM4110-B		200
Sulfide (as mg/L S)	4500-S^2F/D/E/G		200
Sulfite (as mg/L SO_3)	SM4500-SO3B		2000
Total dissolved solids	SM2540 C		20 mg/L
Total Hardness	2340B		200 as CaCO3
Aluminum, Total (7429-90-5)	200.8	2.0	10
Barium Total (7440-39-3)	200.8	0.5	2.0
Boron Total (7440-42-8)	200.8	2.0	10.0
Cobalt, Total (7440-48-4)	200.8	0.05	0.25
Iron, Total (7439-89-6)	200.7	12.5	50
Magnesium, Total (7439-95-4)	200.7	10	50
Molybdenum, Total (7439-98-7)	200.8	0.1	0.5
Manganese, Total (7439-96-5)	200.8	0.1	0.5
Tin, Total (7440-31-5)	200.8	0.3	1.5
METALS, CYANIDE & TOTAL PHENOLS			
Antimony, Total (7440-36-0)	200.8	0.3	1.0
Arsenic, Total (7440-38-2)	200.8	0.1	0.5
Beryllium, Total (7440-41-7)	200.8	0.1	0.5
Cadmium, Total (7440-43-9)	200.8	0.05	0.25
Chromium (hex) dissolved (18540-29-9)	SM3500-Cr EC	0.3	1.2
Chromium, Total (7440-47-3)	200.8	0.2	1.0
Copper, Total (7440-50-8)	200.8	0.4	2.0
Lead, Total (7439-92-1)	200.8	0.1	0.5
Mercury, Total (7439-97-6)	1631E	0.0002	0.0005
Nickel, Total (7440-02-0)	200.8	0.1	0.5
Selenium, Total (7782-49-2)	200.8	1.0	1.0
Silver, Total (7440-22-4)	200.8	0.04	0.2
Thallium, Total (7440-28-0)	200.8	0.09	0.36
Zinc, Total (7440-66-6)	200.8	0.5	2.5
Cyanide, Total (57-12-5)	335.4	2	10
Cyanide, Weak Acid Dissociable	SM4500-CN I	2	10
Phenols, Total	EPA 420.1		50
DIOXIN			
2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin (176-40-16)	1613B	1.3 pg/L	5 pg/L
VOLATILE COMPOUNDS			
Acrolein (107-02-8)	624	5	10
Acrylonitrile (107-13-1)	624	1.0	2.0
Benzene (71-43-2)	624	1.0	2.0

Pollutant & CAS No. *(if available)*	Recommended Analytical Protocol	Detection (DL)[1] *µg/L unless specified*	Quantitation Level (QL)[2] *µg/L unless specified*
Bromoform (75-25-2)	624	1.0	2.0
Carbon tetrachloride (56-23-5)	624/601 or SM6230B	1.0	2.0
Chlorobenzene (108-90-7)	624	1.0	2.0
Chloroethane (75-00-3)	624/601	1.0	2.0
2-Chloroethylvinyl Ether (110-75-8)	624	1.0	2.0
Chloroform (67-66-3)	624 or SM6210B	1.0	2.0
Dibromochloromethane (124-48-1)	624	1.0	2.0
1,2-Dichlorobenzene (95-50-1)	624	1.9	7.6
1,3-Dichlorobenzene (541-73-1)	624	1.9	7.6
1,4-Dichlorobenzene (106-46-7)	624	4.4	17.6
Dichlorobromomethane (75-27-4)	624	1.0	2.0
1,1-Dichloroethane (75-34-3)	624	1.0	2.0
1,2-Dichloroethane (107-06-2)	624	1.0	2.0
1,1-Dichloroethylene (75-35-4)	624	1.0	2.0
1,2-Dichloropropane (78-87-5)	624	1.0	2.0
1,3-dichloropropylene (mixed isomers) (542-75-6)	624	1.0	2.0
Ethylbenzene (100-41-4)	624	1.0	2.0
Methyl bromide (74-83-9) (Bromomethane)	624/601	5.0	10.0
Methyl chloride (74-87-3) (Chloromethane)	624	1.0	2.0
Methylene chloride (75-09-2)	624	5.0	10.0
1,1,2,2-Tetrachloroethane (79-34-5)	624	1.9	2.0
Tetrachloroethylene (127-18-4)	624	1.0	2.0
Toulene (108-88-3)	624	1.0	2.0
1,2-Trans-Dichloroethylene (156-60-5) (Ethylene dichloride)	624	1.0	2.0
1,1,1-Trichloroethane (71-55-6)	624	1.0	2.0
1,1,2-Trichloroethane (79-00-5)	624	1.0	2.0
Trichloroethylene (79-01-6)	624	1.0	2.0
Vinyl chloride (75-01-4)	624/SM6200B	1.0	2.0
ACID COMPOUNDS			
2-Chlorophenol (95-57-8)	625	1.0	2.0
2,4-Dichlorophenol (120-83-2)	625	0.5	1.0
2,4-Dimethylphenol (105-67-9)	625	0.5	1.0
4,6-dinitro-o-cresol (534-52-1) (2-methyl-4,6,-dinitrophenol)	625/1625B	1.0	2.0
2,4 dinitrophenol (51-28-5)	625	1.0	2.0
2-Nitrophenol (88-75-5)	625	0.5	1.0
4-nitrophenol (100-02-7)	625	0.5	1.0
Parachlorometa cresol (59-50-7) (4-chloro-3-methylphenol)	625	1.0	2.0
Pentachlorophenol (87-86-5)	625	0.5	1.0

Pollutant & CAS No. *(if available)*	Recommended Analytical Protocol	Detection (DL)[1] *µg/L unless specified*	Quantitation Level (QL) [2] *µg/L unless specified*
Phenol (108-95-2)	625	2.0	4.0
2,4,6-Trichlorophenol (88-06-2)	625	2.0	4.0
BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)			
Acenaphthene (83-32-9)	625	0.2	0.4
Acenaphthylene (208-96-8)	625	0.3	0.6
Anthracene (120-12-7)	625	0.3	0.6
Benzidine (92-87-5)	625	12	24
Benzyl butyl phthalate (85-68-7)	625	0.3	0.6
Benzo(*a*)anthracene (56-55-3)	625	0.3	0.6
Benzo(j)fluoranthene (205-82-3)	625	0.5	1.0
Benzo(r,s,t)pentaphene (189-55-9)	625	0.5	1.0
Benzo(*a*)pyrene (50-32-8)	610/625	0.5	1.0
3,4-benzofluoranthene (Benzo(b)fluoranthene) (205-99-2)	610/625	0.8	1.6
11,12-benzofluoranthene (Benzo(k)fluoranthene) (207-08-9)	610/625	0.8	1.6
Benzo(*ghi*)Perylene (191-24-2)	610/625	0.5	1.0
Bis(*2-chloroethoxy)*methane (111-91-1)	625	5.3	21.2
Bis(*2-chloroethyl*)ether (111-44-4)	611/625	0.3	1.0
Bis(*2-chloroisopropyl*)ether (39638-32-9)	625	0.3	0.6
Bis(*2-ethylhexyl*)phthalate (117-81-7)	625	0.1	0.5
4-Bromophenyl phenyl ether (101-55-3)	625	0.2	0.4
2-Chloronaphthalene (91-58-7)	625	0.3	0.6
4-Chlorophenyl phenyl ether (7005-72-3)	625	0.3	0.5
Chrysene (218-01-9)	610/625	0.3	0.6
Dibenzo (a,j)acridine (224-42-0)	610M/625M	2.5	10.0
Dibenzo (a,h)acridine (226-36-8)	610M/625M	2.5	10.0
Dibenzo(a-*h*)anthracene (53-70-3)(1,2,5,6-dibenzanthracene)	625	0.8	1.6
Dibenzo(a,e)pyrene (192-65-4)	610M/625M	2.5	10.0
Dibenzo(a,h)pyrene (189-64-0)	625M	2.5	10.0
3,3-Dichlorobenzidine (91-94-1)	605/625	0.5	1.0
Diethyl phthalate (84-66-2)	625	1.9	7.6
Dimethyl phthalate (131-11-3)	625	1.6	6.4
Di-n-butyl phthalate (84-74-2)	625	0.5	1.0
2,4-dinitrotoluene (121-14-2)	609/625	0.2	0.4
2,6-dinitrotoluene (606-20-2)	609/625	0.2	0.4
Di-n-octyl phthalate (117-84-0)	625	0.3	0.6
1,2-Diphenylhydrazine (*as Azobenzene*) (122-66-7)	1625B	5.0	20

Pollutant & CAS No. *(if available)*	**Recommended Analytical Protocol**	**Detection (DL)[1] *µg/L unless specified***	**Quantitation Level (QL) [2] *µg/L unless specified***
Fluoranthene (206-44-0)	625	0.3	0.6
Fluorene (86-73-7)	625	0.3	0.6
Hexachlorobenzene (118-74-1)	612/625	0.3	0.6
Hexachlorobutadiene (87-68-3)	625	0.5	1.0
Hexachlorocyclopentadiene (77-47-4)	1625B/625	0.5	1.0
Hexachloroethane (67-72-1)	625	0.5	1.0
Indeno(*1,2,3-cd*)Pyrene (193-39-5)	610/625	0.5	1.0
Isophorone (78-59-1)	625	0.5	1.0
3-Methyl cholanthrene (56-49-5)	625	2.0	8.0
Naphthalene (91-20-3)	625	0.3	0.6
Nitrobenzene (98-95-3)	625	0.5	1.0
N-Nitrosodimethylamine (62-75-9)	607/625	2.0	4.0
N-Nitrosodi-n-propylamine (621-64-7)	607/625	0.5	1.0
N-Nitrosodiphenylamine (86-30-6)	625	0.5	1.0
Perylene (198-55-0)	625	1.9	7.6
Phenanthrene (85-01-8)	625	0.3	0.6
Pyrene (129-00-0)	625	0.3	0.6
1,2,4-Trichlorobenzene (120-82-1)	625	0.3	0.6
PESTICIDES/PCBs			
Aldrin (309-00-2)	608	0.025	0.05
alpha-BHC (319-84-6)	608	0.025	0.05
beta-BHC (319-85-7)	608	0.025	0.05
gamma-BHC (58-89-9)	608	0.025	0.05
delta-BHC (319-86-8)	608	0.025	0.05
Chlordane (57-74-9)	608	0.025	0.05
4,4'-DDT (50-29-3)	608	0.025	0.05
4,4'-DDE (72-55-9)	608	0.025	0.05[10]
4,4' DDD (72-54-8)	608	0.025	0.05
Dieldrin (60-57-1)	608	0.025	0.05
alpha-Endosulfan (959-98-8)	608	0.025	0.05
beta-Endosulfan (33213-65-9)	608	0.025	0.05
Endosulfan Sulfate (1031-07-8)	608	0.025	0.05
Endrin (72-20-8)	608	0.025	0.05
Endrin Aldehyde (7421-93-4)	608	0.025	0.05
Heptachlor (76-44-8)	608	0.025	0.05
Heptachlor Epoxide (1024-57-3)	608	0.025	0.05
PCB-1242 (53469-21-9)	608	0.25	0.5
PCB-1254 (11097-69-1)	608	0.25	0.5
PCB-1221 (11104-28-2)	608	0.25	0.5
PCB-1232 (11141-16-5)	608	0.25	0.5
PCB-1248 (12672-29-6)	608	0.25	0.5
PCB-1260 (11096-82-5)	608	0.13	0.5
PCB-1016 (12674-11-2)	608	0.13	0.5
Toxaphene (8001-35-2)	608	0.24	0.5

1. Detection level (DL) or detection limit means the minimum concentration of an analyte (substance) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero as determined by the procedure given in 40 CFR part 136, Appendix B.

2. Quantitation Level (QL) is equivalent to EPA's Minimum Level (ML) which is defined in 40 CFR Part 136 as the minimum level at which the entire GC/MS system must give recognizable mass spectra (background corrected) and acceptable calibration points. These levels were published as proposed in the Federal Register on March 28, 1997.